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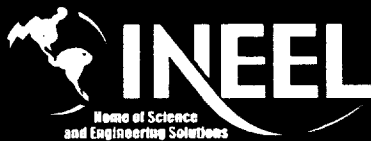
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Waste Management Plan for the VES-SFE-20 Hot Waste Tank System



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Prepared for the
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ABSTRACT

This Waste Management Plan describes waste management and waste minimization activities for the Vessel Storage Facility Exterior-20 (VES-SFE-20) Radioactive Waste Storage Tank at the Idaho Nuclear Technology and Engineering Center located within the Idaho National Engineering and Environmental Laboratory. The waste management activities described in this plan support the selected response action presented in the *Final Record of Decision for Idaho Nuclear Technology and Engineering Center, Operable Unit 3-13*. This plan identifies the waste streams that will be generated during implementation of the remedial action and details plans for waste minimization, waste management strategies, and waste disposition.

CONTENTS

ABSTRACT.....	iii
ACRONYMS.....	vii
1. INTRODUCTION.....	1
1.1 Purpose and Objectives	1
2. SITE BACKGROUND AND FACILITY DESCRIPTION	2
3. WASTE GENERATION.....	6
3.1 Waste Identification	6
4. GENERAL REQUIREMENTS	11
4.1 Remediation Waste.....	11
4.2 Characterization	11
4.3 Waste Minimization and Segregation.....	11
4.4 Waste Management and Disposition	12
5. MANAGEMENT AND DISPOSITION OF WASTE	14
5.1 Packaging.....	14
5.2 Labeling and Marking	14
5.3 Staging and Inspection.....	14
5.4 Tracking, Reporting, and Recordkeeping	16
6. REFERENCES.....	17

FIGURES

1. INEEL location map.....	3
2. Location of VES-SFE-20.....	4
3. Isometric view of the tank vault and pump pit.....	5
4. Cross section of typical waste staging pile	15

TABLES

1. Waste management during VES-SFE-20 remediation activities.....	7
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ACRONYMS

ALLW	alpha low-level waste
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFA	Central Facilities Area
CPP	Chemical Processing Plant
DOE	Department of Energy
DOT	Department of Transportation
HDPE	high-density polyethylene
HW	hazardous waste
HWD	hazardous waste determination
ICDF	INEEL CERCLA Disposal Facility
INEEL	Idaho National Engineering and Environmental Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
IW	industrial waste
IWTS	Integrated Waste Tracking System
LLW	low-level waste
MLLW	mixed low-level waste
OU	operable unit
PCB	polychlorinated biphenyl
PPE	personal protective equipment
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
SFE	Storage Facility Exterior
TRU	transuranic
TSCA	Toxic Substances Control Act
VES	vessel

WAC	Waste Acceptance Criteria
WGS	Waste Generator Services
WIPP	Waste Isolation Pilot Plant
WMP	Waste Management Plan
WTS	waste technical specialist

Waste Management Plan for the VES-SFE-20 Hot Waste Tank System

1. INTRODUCTION

The Environmental Restoration Program at the Idaho National Engineering and Environmental Laboratory (INEEL) prepared this Waste Management Plan (WMP). This WMP provides guidance for waste management necessary to identify disposal criteria for waste materials associated with the Vessel (VES) Storage Facility Exterior (SFE) -20 Radioactive Waste Storage Tank system (hereafter known as VES-SFE-20). The tank is located approximately 6 m (20 ft) beneath the Chemical Processing Plant (CPP) -642 building, which is part of the CPP-603 facility. Building CPP-642 is located just east of the CPP-603 facility.

The primary objective of this WMP is to ensure wastes are properly managed during activities associated with the VES-SFE-20 remediation. This plan provides identification of each of the waste streams, describes waste minimization actions, and provides the requirements for waste transportation and ultimate disposal.

1.1 Purpose and Objectives

This WMP is intended to provide a management and planning tool for identifying and managing the waste streams generated from the SFE-20 remediation activities.

2. SITE BACKGROUND AND FACILITY DESCRIPTION

The INEEL is a government facility managed by the Department of Energy (DOE) located 51.5 km (32 mi) west of Idaho Falls, Idaho. It occupies 2,305 km² (890 mi²) of the northeastern portion of the Eastern Snake River Plain. The Idaho Nuclear Technology and Engineering Center (INTEC) is located in the south-central portion of the INEEL as shown in Figure 1.

The INTEC began operating in 1952. The primary missions were reprocessing uranium for defense purposes and researching and storing spent nuclear fuel. Irradiated defense nuclear fuels were reprocessed to recover unused uranium. In 1992, the reprocessing mission was phased out. The current INTEC mission is receiving and temporarily storing spent nuclear fuel and radioactive wastes for future disposition.

The VES-SFE-20 tank vault and its associated pump house CPP-642 are located east of CPP-603 (Figures 2 and 3) near the south perimeter of INTEC. The tank and contents, along with the tank vault, pump pit, and associated piping, are part of Operable Unit (OU) 3-13 and are identified as Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Site CPP-69. The system is more fully described in the Remedial Design/Remedial Action Work Plan (DOE-ID 2003a).

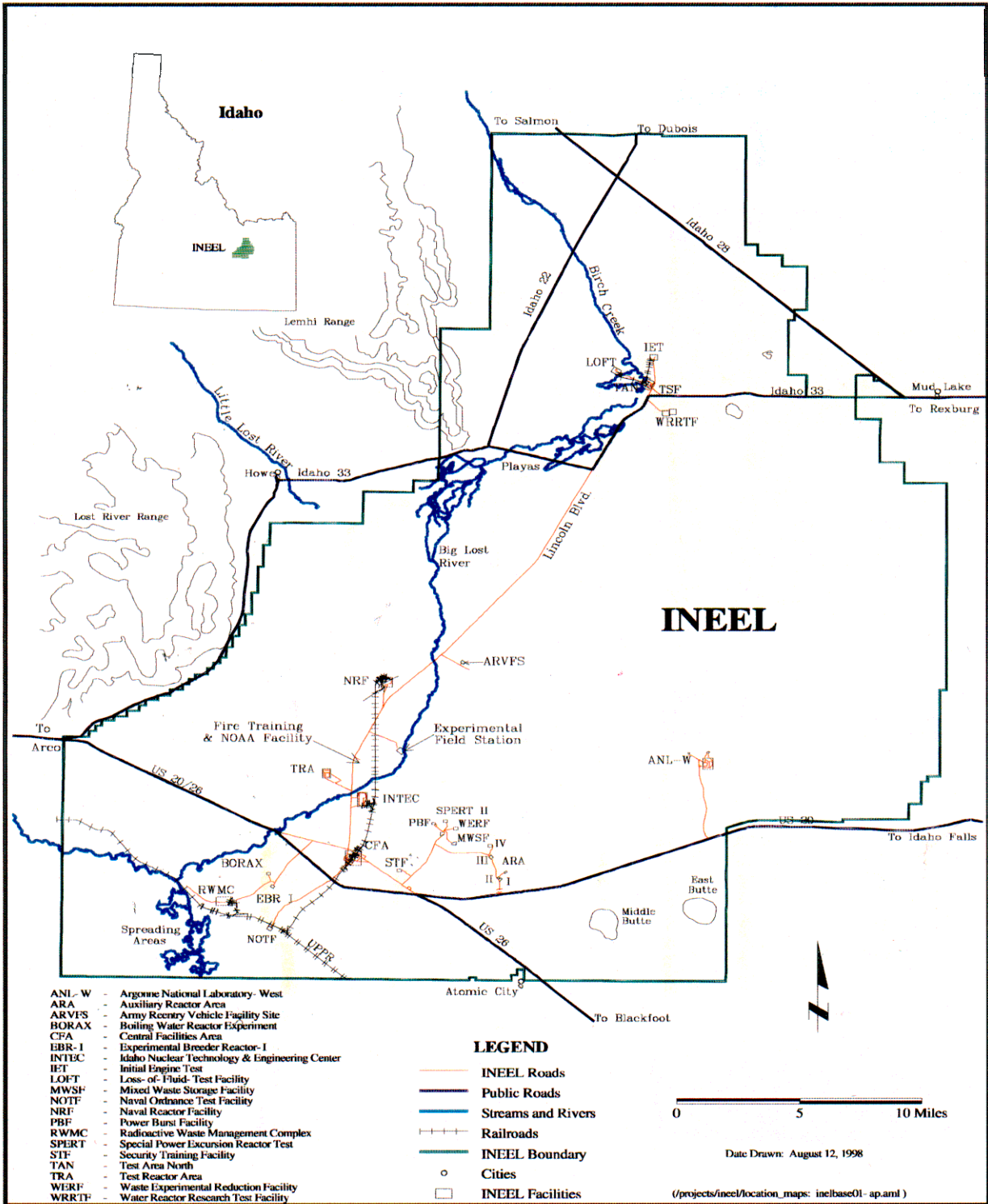


Figure 1. INEEL location map.

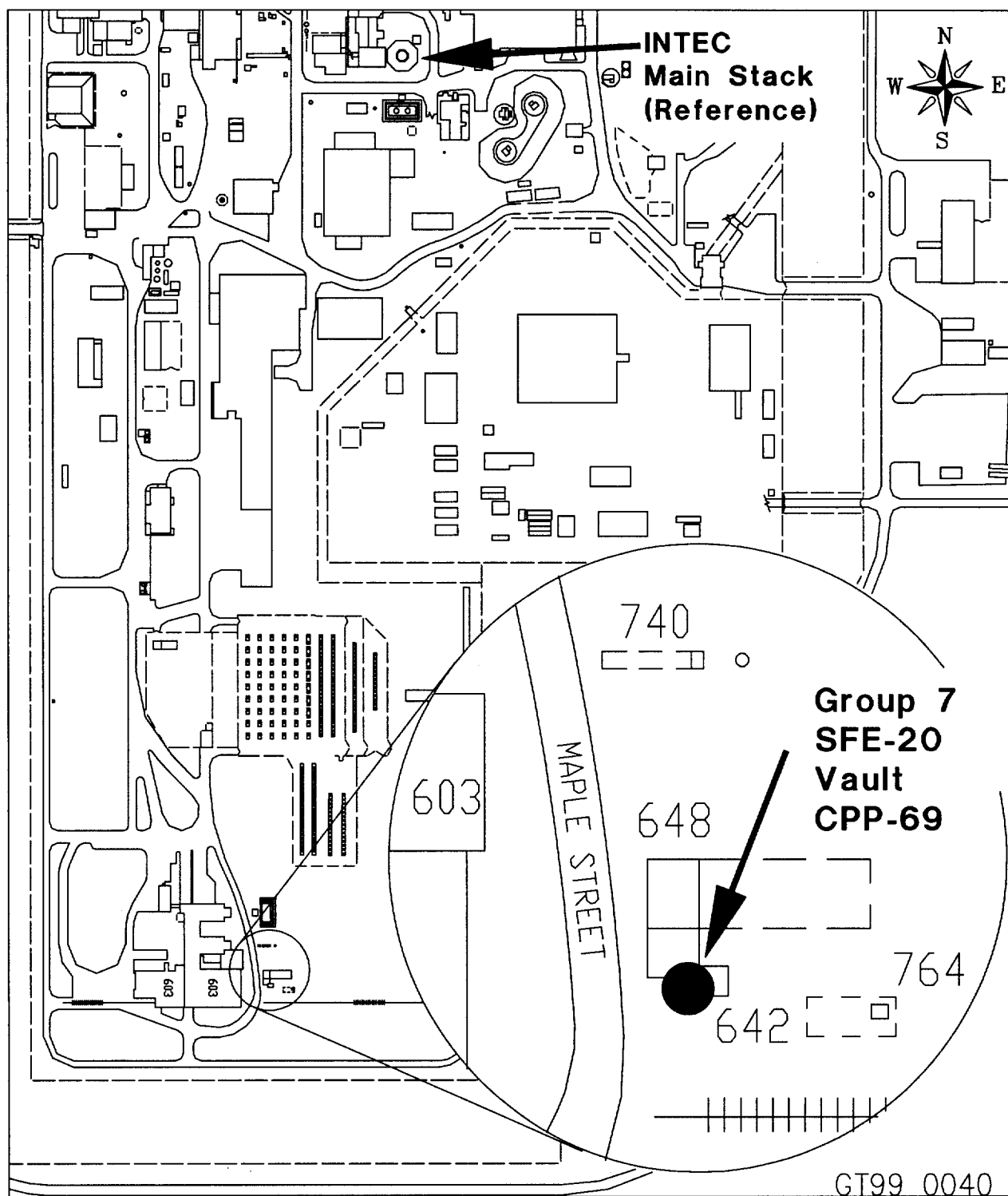


Figure 2. Location of VES-SFE-20.

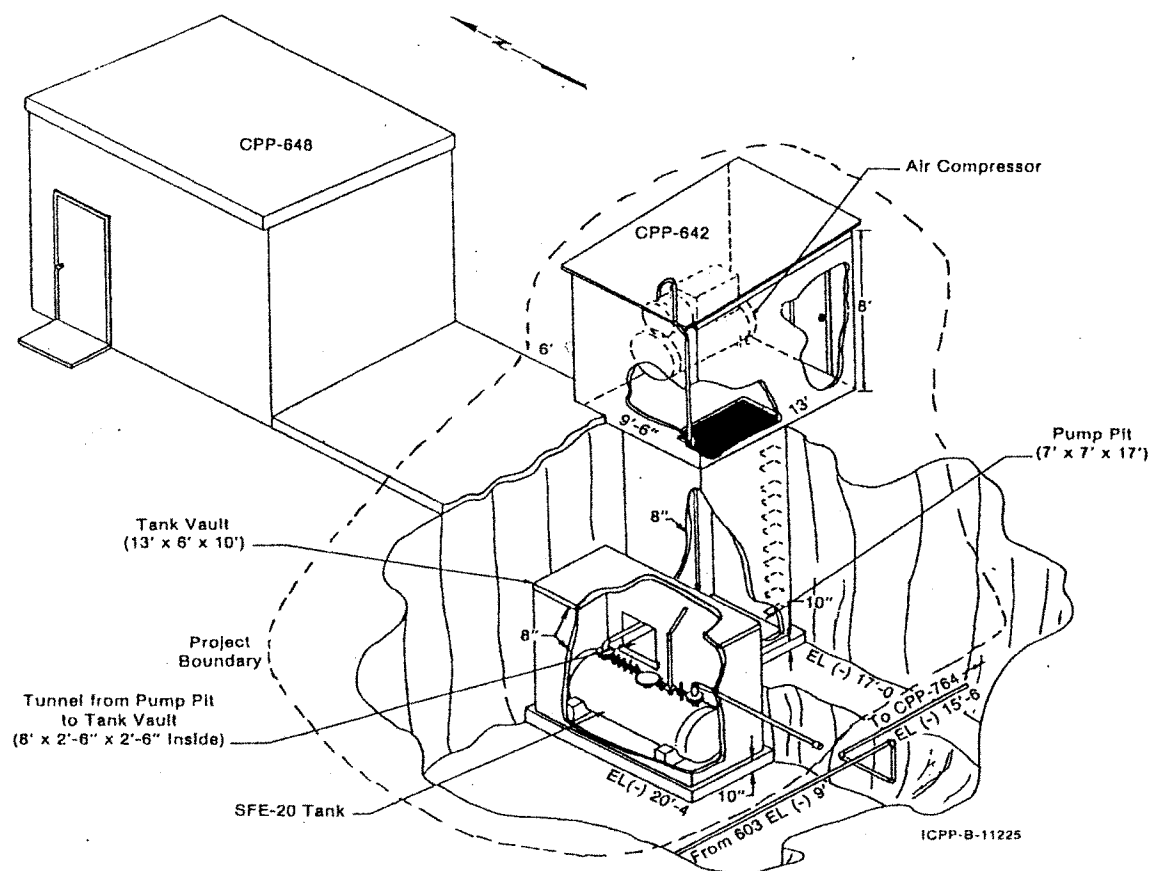


Figure 3. Isometric view of the tank vault and pump pit.

3. WASTE GENERATION

The following section provides descriptions of the waste streams and associated disposal options for those wastes expected to be generated as a result of VES-SFE-20 activities.

All waste streams will be characterized as required by DOE orders and in accordance with 40 CFR 262.11. Hazardous waste determinations (HWDs) will be performed on all waste streams.

3.1 Waste Identification

Table 1 identifies and describes the waste types that may be generated as a result of VES-SFE-20 remediation activities, management strategies, and the proposed disposition of each waste type.

Table 1. Waste management during VES-SFE-20 remediation activities.

Waste Type	Description	Management Strategy	Disposition ^a
Industrial waste (IW)	<p>Solid waste generated by industrial processes, manufacturing, and support processes (40 CFR 243). Certain wastes, such as nontraining-related personal protective equipment (PPE), petroleum-contaminated material such as soil, sand, gravel, or other earthen material, engine oil filters, etc., require a waste-stream-specific, documented waste determination per the <i>INEEL Waste Acceptance Criteria</i> (WAC) (DOE-ID 2003b).</p> <p>Activities that may generate IW include administrative activities, sampling, and cleanup (e.g., petroleum spills).</p>	<p>All wastes must be characterized, documented, and tracked if necessary as described in this WMP.</p> <p>IW will be transported to the Central Facilities Area (CFA) landfill for disposal. Recyclable and reusable items will be managed under this WMP and the INEEL WAC.</p> <p>Requirements for disposal (described in the INEEL WAC) must be met.</p>	<p>INEEL Landfill Complex (at CFA) or recycled/reused under the INEEL WAC and this WMP.</p>
Low-level waste (LLW)	<p>Waste that is not high-level radioactive waste, spent nuclear fuel, transuranic (TRU) waste, by-product or naturally occurring radioactive material.</p> <p>LLW may include (but is not limited to) solid sampling and monitoring materials, tarps, and other material from staging activities; equipment that cannot be decontaminated, and other radiologically contaminated materials such as petroleum-contaminated media (i.e., soil or other absorbent materials containing radiological- and petroleum-contaminated materials).</p> <p>Activities that may generate LLW include sampling and monitoring, remediation activities, and decontamination.</p>	<p>All wastes must be characterized, documented, and tracked if necessary as described in this WMP.</p> <p>If necessary, solid waste streams will be staged and managed in accordance with this WMP.</p> <p>If liquid wastes are generated during remediation, these wastes will be disposed of at the INEEL CERCLA Disposal Facility (ICDF) if they meet the ICDF WAC. If they do not meet the ICDF WAC, an alternate disposal facility will be determined.</p>	<p>ICDF landfill.</p> <p>In the event wastes do not meet the ICDF landfill WAC, they will be containerized, treated, and/or stored at the ICDF as necessary or required until appropriate on-Site or off-Site disposal is arranged.</p>
Alpha LLW (ALLW)	<p>Wastes that contain >10 nCi/gm but <100 nCi/gm of TRU isotopes.</p> <p>ALLW may include (but is not limited to) solid sampling and monitoring materials, tarps, and other material from staging activities; equipment that cannot be decontaminated, and other radiologically contaminated materials such as petroleum-contaminated media (i.e., soil or other absorbent materials containing radiological- and petroleum-contaminated materials).</p> <p>Activities that may generate ALLW include sampling and monitoring, remediation activities, and decontamination.</p>	<p>All wastes must be characterized, documented, and tracked if necessary as described in this WMP.</p> <p>If necessary, solid waste streams will be staged and managed in accordance with this WMP.</p> <p>If liquid wastes are generated during remediation, these wastes will be disposed of at the ICDF if they meet the ICDF WAC. If they do not meet the ICDF WAC, an alternate disposal facility will be determined.</p>	<p>These wastes will be containerized, treated, and/or stored at the ICDF as necessary or required until appropriate off-Site disposal is arranged, if required.</p>

Table 1. (continued).

Waste Type	Description	Management Strategy	Disposition ^a
Hazardous waste (HW)	<p>Waste designated as hazardous by the Environmental Protection Agency regulations (40 CFR 261.3) and regulated under the Resource Conservation and Recovery Act (RCRA).</p> <p>HW streams may include (but are not limited to) materials that are determined hazardous based on process knowledge, materials from sampling activities, remediation activities, decontamination materials, and materials used during sampling activities.</p>	<p>determined.</p> <p>All wastes must be characterized, documented, and tracked as described in this WMP.</p> <p>If necessary, solid waste streams will be staged and managed in accordance with this WMP.</p> <p>If liquid wastes are generated during remediation, these wastes will be disposed of at the ICDF if they meet the ICDF WAC. If they do not meet the ICDF WAC, an alternate disposal facility will be determined.</p>	<p>ICDF landfill.</p> <p>In the event wastes do not meet the ICDF landfill WAC, the wastes will be containerized, treated, and/or stored at the ICDF as necessary or required until appropriate on-Site or off-Site treatment, storage, or disposal is arranged.</p>
Mixed low-level waste (MLLW)	<p>Waste containing both radioactive and RCRA-hazardous components.</p> <p>MLLW streams may include (but are not limited to) materials from sampling activities, decontamination materials, petroleum-contaminated materials from remediation activities, tank, sediment, piping, and soil.</p>	<p>All wastes must be characterized, documented, and tracked if necessary as described in this WMP.</p> <p>If necessary, solid waste streams will be staged and managed in accordance with this WMP. If liquid wastes are generated during remediation, these wastes will be disposed of at the ICDF if they meet the ICDF WAC. If they do not meet the ICDF WAC, an alternate disposal facility will be determined.</p>	<p>ICDF landfill.</p> <p>In the event wastes do not meet the ICDF landfill WAC, the wastes will be containerized, treated, and/or stored at the ICDF as necessary or required until appropriate on-Site or off-Site treatment, storage, or disposal is arranged.</p>
Asbestos and polychlorinated biphenyl (PCB) waste (including radioactively contaminated asbestos and PCB waste)	<p>Waste managed strictly under National Emission Standard Hazardous Air Pollutants or Toxic Substances Control Act (TSCA) regulations, as applicable.</p> <p>These waste streams may include (but are not limited to) building materials, materials from sampling and decontamination activities, and remediation activities (e.g., insulation, PPE, soil).</p>	<p>All wastes must be characterized, documented, and tracked as described in this WMP.</p> <p>If necessary, solid waste streams will be staged and managed in accordance with Section 5.3 of this WMP.</p> <p>If liquid TSCA wastes are generated during remediation, these wastes will be disposed of at the ICDF if they meet the</p>	<p>ICDF landfill or INEEL landfill.</p> <p>If, during the HWD, asbestos-containing material is found to not have a radioactive component associated with it, the asbestos-containing material</p>

Table 1. (continued).

Waste Type	Description	Management Strategy	Disposition ^a
Mixed TRU waste	Waste that contains transuranic isotopes exceeding 100 nCi/gm and containing RCRA hazardous components.	ICDF WAC. If they do not meet the ICDF WAC, an alternate disposal facility will be determined.	will be disposed of in the INEEL Landfill Complex (at CFA) if it meets the INEEL WAC.
	Mixed TRU waste may include (but is not limited to) solid sampling materials, equipment that cannot be decontaminated, tank sediment, tank, piping, and soil.	All asbestos waste will be managed in accordance with 40 CFR 61, Subpart M; 40 CFR 61.145; 40 CFR 61.150; and 40 CFR 61.156. Asbestos-containing material will be wetted, bagged, sealed, and labeled in accordance with the appropriate requirements.	In the event a waste stream does not meet the ICDF landfill WAC, the waste will be containerized, treated, and/or stored at the ICDF as necessary or required until appropriate on-Site or off-Site treatment, storage, or disposal is arranged.
		All wastes must be characterized, documented, and tracked if necessary as described in this WMP.	In the event TRU mixed wastes are generated, they will be containerized and stored at the ICDF as necessary or required until they can be shipped to a treatment or disposal facility. If the final waste form is determined to be TRU mixed waste, the waste will be disposed of at the Waste Isolation Pilot Plant (WIPP), subject to WAC compliance.
		If necessary, solid waste streams will be staged and managed in accordance with this WMP. If liquid wastes are generated during remediation, these wastes will be disposed of at the ICDF if they meet the ICDF WAC. If they do not meet the ICDF WAC, an alternate disposal facility will be determined.	

Table 1. (continued).

Waste Type	Description	Management Strategy	Disposition ^a
TRU waste	<p>Waste that contains transuranic isotopes exceeding 100 nCi/gm.</p> <p>TRU waste may include (but is not limited to) solid sampling materials, equipment that cannot be decontaminated, tank sediment, tank, piping, and soil.</p>	<p>All wastes must be characterized, documented, and tracked if necessary as described in this WMP.</p> <p>If necessary, solid waste streams will be staged and managed in accordance with this WMP.</p> <p>If liquid wastes are generated during remediation, these wastes will be disposed of at the ICDF if they meet the ICDF WAC. If they do not meet the ICDF WAC, an alternate disposal facility will be determined.</p>	<p>In the event TRU wastes are generated, they will be containerized and stored at the ICDF as necessary or required until they can be shipped to a treatment or disposal facility. If the final waste form is determined to be TRU, the waste will be disposed of at WIPP, subject to WAC compliance.</p>

a. Most IW will be sent to the landfill at the CFA for disposal (subject to meeting the INEEL WAC). IW that does not meet the INEEL WAC will be managed at the ICDF Complex under this WMP.

4. GENERAL REQUIREMENTS

This section describes the general requirements for waste management.

4.1 Remediation Waste

Waste resulting from the VES-SFE-20 remediation that may require disposal may include PPE, soil, concrete, metal piping, tank, and tank contents. These wastes will be managed in accordance with the final Record of Decision (ROD) for OU 3-13 (DOE-ID 1999), this WMP, *INEEL Waste Acceptance Criteria* (DOE-ID 2003b), the *ICDF Complex Operations Waste Management Plan* (DOE-ID 2003c), applicable Waste Acceptance Criteria (WAC), and appropriate regulations.

4.2 Characterization

Waste generated during the VES-SFE-20 remediation will be characterized and a HWD performed per applicable Resource Conservation and Recovery Act (RCRA) regulations (40 CFR 262.11). As outlined in Section 3, preliminary classifications have been made of anticipated waste types based on process knowledge regarding the source(s) of the expected waste. Subsequent to generation, any or all of the waste may be reclassified. Prior to ultimate disposal, waste may be further characterized to ensure compliance with the INEEL CERCLA Disposal Facility (ICDF) WAC or other applicable disposal facility WAC. Sampling of the waste for characterization purposes will be performed in accordance with the approach outlined in Section 5.7 of the Field Sampling Plan (DOE-ID 2003d). Appropriate and required documentation of waste characterization will be completed.

Debris characterization may utilize an estimation method developed to determine the probable distribution of radionuclide and chemical contaminant concentrations on or within the debris (piping, concrete, etc). This method will utilize the data obtained from sampling of the tank contents (worst case). The contaminant thickness will be determined by visually inspecting representative portions of the debris. Using this information, a mass balance can then be calculated using an assumed or calculated density of the debris and the linear feet of debris present. Upon completion of the mass balance calculations, a HWD will be made.

4.3 Waste Minimization and Segregation

Waste minimization for this project will be accomplished through design and planning to ensure efficient operations that will not generate unnecessary waste. As part of the prejob briefing, emphasis will be placed on waste reduction philosophies and techniques, and personnel will be encouraged to continuously attempt to improve methods for minimizing waste generation. Practices to be instituted to support waste minimization include, but are not limited to, the following:

- Restricting material (especially hazardous material) entering radiological buffer areas to those needed for work performance
- Substituting recyclable items for nonhazardous and easily disposed of items
- Reusing items when practical
- Segregating contaminated waste from uncontaminated waste.

4.4 Waste Management and Disposition

Wastes from remediation of VES-SFE-20 will be managed and dispositioned in accordance with this WMP. The planned management and disposition of the waste streams described in this WMP are based on information from the Remedial Investigation/Feasibility Study (DOE-ID 1997), the Record of Decision (DOE-ID 1999), the Remedial Design/Remedial Action Work Plan (DOE-ID 2003a), and other available data. The anticipated waste types, initial characterizations, anticipated treatments (if any), and planned dispositions were developed and reviewed in the preparation of this WMP. One of the primary objectives of this plan is to evaluate the appropriateness of management and disposal options for the anticipated waste. Appropriateness of a disposal option is based on whether that waste could reasonably be expected to cause or contribute to an environmentally significant release of hazardous substances from that facility. Environmentally significant releases would be releases to the air or groundwater of those quantities of hazardous substances that could reasonably be expected to pose a significant threat to human health and the environment. Any of the waste described in this WMP that would reasonably be expected to exceed this threshold criterion will be separately evaluated to determine the suitability of the waste for disposal. This waste will not be shipped for disposal unless special provisions are made and documented to mitigate the potential for release. The primary list of hazardous substances under CERCLA is provided in 40 CFR 302.4. As the remedial process proceeds and more information becomes available, more detailed reviews are conducted as described below to ensure that waste planned for specific disposal options meets the detailed WAC for each specific facility.

As shown in Table 1, the anticipated wastes to be generated are predominantly industrial waste (IW), low-level waste (LLW), alpha LLW, hazardous waste (HW), mixed low-level waste (MLLW), Toxic Substances Control Act (TSCA) waste, transuranic (TRU) waste, or mixed TRU waste, and mixed alpha low-level waste. All wastes generated will be segregated (when practicable), containerized, labeled, and stored, if needed, in accordance with applicable requirements of the ROD for OU 3-13, ICDF Complex Operations WMP (DOE-ID 2003c), Department of Transportation (DOT), the INEEL WAC (DOE-ID 2003b), and appropriate regulations. All wastes processed for storage or disposal at the INEEL are subject to compliance with the requirements defined by the appropriate WAC of the applicable storage or disposal facility.

IW is solid waste that is neither radioactive nor hazardous. IW streams at the INEEL are typically disposed at the INEEL Landfill Complex. Many CERCLA IWs are typically generated in the area of contamination as a result of material used in a remediation project that the generator believes has not become contaminated with either radioactive or hazardous materials. This lack of contamination is validated through the use of radiation surveys or visual inspections. A general HWD is prepared for routinely generated IW to document that the waste is neither radioactive nor hazardous waste.

IW waste streams that have a higher probability of containing constituents restricted from disposal are considered nonroutine and will undergo a waste-stream-specific HWD. This is accomplished by sampling, performing radioactive surveys, using process knowledge of the IW waste generating process (e.g. was the waste mixed with a listed waste or derived from the treatment, storage, or disposal of a listed waste?), and evaluating the composition of the IW.

Waste Generator Services (WGS) evaluates CERCLA IW to determine if the waste meets the IW acceptance criteria. IW is generally collected in IW collection dumpsters. Signs on the collection dumpsters describe acceptable and prohibited items. Other methods utilized at the INEEL Landfill Complex to ensure disposal of IW is protective to human health and the environment are

- Characterization of IW by WGS to ensure the requirements of the WAC are met prior to shipment to the facility.

- Prohibiting the receipt of radioactive and hazardous waste.
- Prohibiting the receipt of free liquids at the landfill.
- Periodic waste inspections of received waste to validate that the waste meets the acceptance and waste determination criteria.
- Groundwater monitoring wells are located and sampled periodically in the vicinity of the INEEL Landfill Complex.

Environmental monitoring data have not indicated an environmentally significant release of hazardous substances has occurred to the air or groundwater from current IW disposal operations at the INEEL Landfill Complex. The current disposal area at the INEEL Landfill Complex is a solid waste management unit. As such, if any future environmentally significant releases to the air or groundwater are identified, the release may be subject to potential response action, as stipulated by Section V of the FFA/CO (DOE-ID 1991).

5. MANAGEMENT AND DISPOSITION OF WASTE

Waste resulting from the VES-SFE-20 remediation will be stored and disposed of, as applicable, in accordance with the final ROD for OU 3-13 (DOE-ID 1999), this WMP, INEEL WAC (DOE-ID 2003b), the ICDF Complex Operations WMP (DOE-ID 2003c), applicable WAC, and appropriate regulations.

5.1 Packaging

Packaging of all waste materials generated will be in compliance with the applicable WAC; the DOT regulations (49 CFR 171, 49 CFR 173, 49 CFR 177, and 49 CFR 178); asbestos regulations (40 CFR 61.150); and RCRA regulations found in 40 CFR 264 Subpart I.

5.2 Labeling and Marking

Waste containers in staging will be labeled and marked in accordance with the applicable receiving facility's requirements. Specifically, waste destined for the ICDF shall be labeled in accordance with the labeling requirements identified in that facility's WMP. IW destined for the INEEL Landfill Complex shall meet the INEEL WAC and be labeled in accordance with the applicable requirements specified in that facility's WAC. CERCLA waste destined for an off-Site facility shall, at a minimum, have an Integrated Waste Tracking System (IWTS) label, radiation label (if applicable), and a CERCLA waste label to ensure that personnel know the contents within the container. The CERCLA waste label shall identify the project that generated the waste (e.g., OU 3-13, Group 7); the date the waste was placed in storage or staging; the waste description (solid, liquid, soil, debris, PPE, etc.); and the waste hazards (e.g., radioactive, asbestos-contaminated, RCRA waste codes). Prior to off-Site transport, additional labeling may be required, including DOT-required labeling.

Any information not known when waste containers are initially labeled may be added when the information is known. WGS personnel will provide IWTS bar codes for containers, as applicable. A new bar code will be affixed to each container when waste is first placed in the container. Waste labels must be visible, legibly printed or stenciled, and placed on the container in a manner so that a full set of labels and markings is visible during an inspection.

5.3 Staging and Inspection

Remediation waste staging piles may be used to manage waste soil piles or containers of CERCLA hazardous or mixed waste. (Figure 4 depicts a cross section of a typical staging pile.) Staging piles may be used for a period of up to 24 months unless an extension is provided by the Agencies. If waste is staged prior to treatment and disposal, the waste will be staged in the designated area depicted in the RD/RA Work Plan, Figure 6-1. The staging and inspection of all waste generated from this activity will be performed in accordance with the applicable requirements for waste staging piles found in 40 CFR 264.554 and this WMP.

If staging piles will be used for staging of solid, nonflowing noncontainerized remediation wastes, the wastes will be placed on impervious liners. Construction of the base will ensure there is at least a 2% slope away from the soil waste pile to ensure proper drainage. The bottom liner material for the soil will be of sufficient strength/design to withstand the planned staging and subsequent removal of soils. The bottom liner will extend at least 5 ft beyond every edge of the waste soil pile. The use of an impervious man-made material will be implemented to cover the soil piles at all times when the soil is not being actively managed (that is, placing, sampling, or removing waste). The cover will extend beyond the bottom liner and will be secured so that the staging pile soils are not exposed to the wind, precipitation, or

Typical Waste Staging Pile

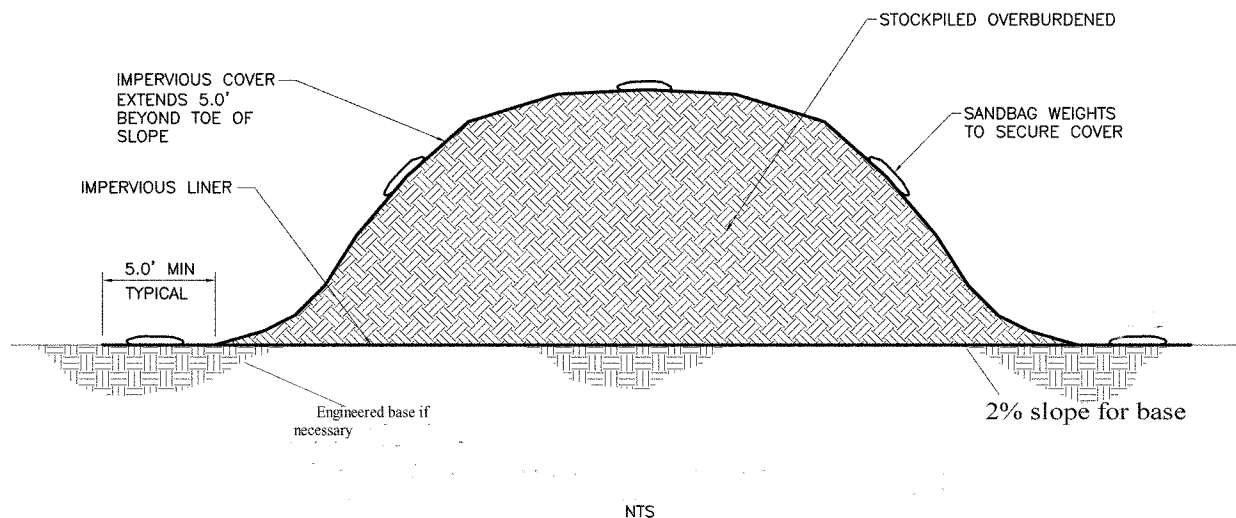


Figure 4. Cross section of typical waste staging pile.

elements. The cover will be constructed of impervious material sufficient to withstand site conditions (that is, sun, wind, cold, heat, and movement to expose/cover the working face). Waste will not be added or removed during inclement weather (that is, periods of precipitation and/or high winds). Incompatible wastes will not be stored in close proximity. Soils in the waste staging piles will be managed in a manner that will eliminate any potential run-on/run-off from entering the staging pile, or run-off from contacting the soils, thus eliminating the need to contain run-off. Waste staging piles will be appropriately barricaded and signed. If containers will be used for staging of solid, nonflowing remediation wastes, they will be managed in rows, and a minimum aisle spacing of 30 in. will be maintained between rows and between containers and boundaries to allow adequate inspection and maintenance. All waste staging piles and containers will be inspected weekly.

The subbase of the staging piles will be constructed of compacted gravel. The liner system could be a geosynthetic, asphalt, or concrete slab (minimum 4 in. thick). Geosynthetics could be 30-, 60-, or 100-mil-thick high-density polyethylene (HDPE) with or without a geosynthetic cushion. Compatibility between the liner material and expected wastes will be a criterion in liner selection. Covers could be a geosynthetic material (e.g., HDPE, very-low-density polyethylene, polypropylene, or hypalon) or a 15-mil scrim-reinforced HDPE. Compatibility between the cover material and expected wastes will be a criterion in cover selection. Another criterion will be the ability to withstand sustained winds of 35-50 mph with appropriate anchorage.

Containers, if used for waste staging, will be selected to ensure compatibility with the waste being managed. Wastes that may be managed in containers include soil, containerized debris such as equipment, tank system components, and piping. The containers will be managed to enable inspection and ensure no releases are associated with their management.

5.4 Tracking, Reporting, and Recordkeeping

Information pertaining to the waste characteristics, waste generation and storage locations, disposition plans, and waste shipments for contaminated (hazardous and/or radionuclide) CERCLA wastes and nonroutine CERCLA IW generated at the INEEL is maintained in an electronic data base called the IWTS. IWTS Material Profiles are developed to provide characterization information specific to a particular waste stream. As the waste is generated, specific information pertaining to individual containers of waste is reported in individual IWTS Container Profiles. The information in the IWTS Material Profiles and Container Profiles is certified by a WGS waste technical specialist (WTS) that the HWD has been performed and that the information is complete and accurate based on the analytical data or process knowledge information used for characterization and that the information for the container falls within the bounds of the parent Material Profile. This information is then independently reviewed for completeness and accuracy by a different WGS WTS. Finally, the information in the Material and Container Profiles is approved by a WGS WTS authorizing WGS to disposition the waste in accordance with the disposition path defined in the IWTS Material Profile and that the waste meets the acceptance criteria of the facility or facilities where the waste will be disposed. This approval cannot be performed by the WTS performing the review.

WGS WTSs use the information in the IWTS Material and Container Profiles to ensure the CERCLA waste meets the acceptance criteria of the receiving facility. IWTS also tracks shipments of waste to various facilities using IWTS Shipping Tasks. For on-Site shipments, the receiving facility must approve shipments before they are shipped. For facilities utilized outside the boundaries of the INEEL, approval must be received from the facility before the waste can be shipped. This approval is not documented in the IWTS database but is maintained in a hard copy file with the waste characterization information.

It should be noted that not all CERCLA IW is tracked in the IWTS database. An example of IW that is not tracked in IWTS is routine office waste. This waste is placed into IW receptacles that are placarded with information pertaining to what is permissible to be placed in the receptacles. Some IW is tracked in the IWTS database to ensure the INEEL Landfill Complex is aware the waste is being shipped and that it meets the facility's acceptance criteria. An example of IW that would be tracked in IWTS is color-code material such as yellow shoe covers. Since yellow shoe covers are typically used for protection from radioactive contamination, a special profile has been prepared for color-coded PPE that has been surveyed and found not to be contaminated with radioactivity or that has been used for training purposes. Another example is empty containers where all the contents have been removed and the containers are not radiologically contaminated. IWTS Container Profiles are typically not prepared for IW because the waste is shipped to the facility in reusable receptacles or the waste is shipped in bulk shipments or noncontainerized.

CERCLA wastes that must be shipped off-Site for appropriate storage, treatment, and disposal shall meet the applicable requirements of the DOT, the receiving facility's WAC, and the off-Site rule (40 CFR 300.440) requirements.

6. REFERENCES

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